

What is claimed is:

1. A method for obtaining a transduced population of viable cells by a retrovirus, comprising:
- 5 infecting the cells with a retrovirus in the presence of an effective immobilized amount of material including a ligand which binds to the cells and a ligand which binds to the retrovirus, so as to co-localize the retrovirus and the cells and increase the transduction efficiency of the cells, said infecting being conducted in a medium essentially free from hexadimethrine bromide.
- 10 2. The method of claim 1 wherein the cells comprise hematopoietic stem cells.
3. A viable cellular population produced by the method of claim 1.
- 15 4. The viable cellular population of claim 3 which comprises hematopoietic stem cells.
5. A method for cellular grafting, comprising:
- 20 grafting a mammal with a viable cellular population produced by the method of claim 1.
6. A cellular composition, comprising:
- 25 a substantially retroviral-transduced population of viable cells, said composition being essentially free from both retroviral producer cells and hexadimethrine bromide.

09394867-091399

7. The cellular composition of claim 6 wherein said viable cells comprise hematopoietic stem cells.

8. A method for cellular grafting, comprising:
5 grafting a mammal with a cellular population according to claim 6.

9. The method of claim 8 wherein the cellular population comprises hematopoietic stem cells.

10. A method for obtaining a transduced population of viable cells by a retrovirus, comprising:

15 infecting the cells with a retrovirus in the presence of an effective immobilized amount of material including a ligand which binds to the cells and a ligand which binds to the retrovirus, so as to co-localize the retrovirus and the cells and increase the transduction efficiency of the cells, said infecting being conducted in a medium essentially free from agents which increase the efficiency of transduction of the cells by the retrovirus in co-culture, but which agents reduce the efficiency of transduction of the cells by the retrovirus in the presence of said material..

09394867 091399

Amika